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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/779,988	02/17/2004	Gerrit Konijn	TS1194 (US)	1334
23632	7590	09/30/2005	EXAMINER	
SHELL OIL COMPANY P O BOX 2463 HOUSTON, TX 772522463			BUSHEY, CHARLES S	
			ART UNIT	PAPER NUMBER
			1724	
DATE MAILED: 09/30/2005				

Please find below and/or attached an Office communication concerning this application or proceeding.

**Office Action Summary**

Application No.

10/779,988

Applicant(s)

KONIJN, GERRIT

Examiner

Scott Bushey

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 17 August 2005.  
2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.  
3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-14 is/are pending in the application.  
4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.  
5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.  
6) ☒ Claim(s) 1-14 is/are rejected.  
7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.  
8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☒ The specification is objected to by the Examiner.  
10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).  
11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).  
a) ☒ All b) ☐ Some \* c) ☐ None of:  
1. ☒ Certified copies of the priority documents have been received.  
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.  
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).  
\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- 1) ☐ Notice of References Cited (PTO-892)  
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)  
3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)  
Paper No(s)/Mail Date 8-17-05.  
4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_\_.  
5) ☐ Notice of Informal Patent Application (PTO-152)  
6) ☐ Other: \_\_\_\_\_.

## DETAILED ACTION

### *Specification*

1. The abstract of the disclosure is objected to because 1) use of legal phraseology, i.e., "comprises" and "means" should be avoided in the abstract; and 2) the abstract is too long as it should be limited to a single paragraph of between 50 and 150 words.

Correction is required. See MPEP § 608.01(b).

2. The disclosure is objected to because of the following informalities: page 12, line 6, "48a a will" should be replaced by --48a will--.

Appropriate correction is required.

### *Claim Rejections - 35 USC § 102*

3. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

4. Claims 1-8 are rejected under 35 U.S.C. 102(b) as being clearly anticipated by EPO 0 048 508 A2 (Figs. 6 and 7).

### *Claim Rejections - 35 USC § 103*

5. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

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6. Claims 9-14 are rejected under 35 U.S.C. 103(a) as being unpatentable over EPO 0 048 508 A2 taken together with Sheinman.

EPO 0 048 508 A2 (Figs. 6 and 7) as applied above substantially discloses applicant's invention as recited by instant claims 9-14, except for the specific recitation that the swirl imparting means are formed integrally with the bottom wall and are formed by providing the metal plate of the bottom wall with slits and then bending the segments out of the plane of the plate. While silent to the manner of forming the swirl vanes, the EPO reference almost certainly forms the vanes from a metal sheet or plate.

Furthermore, applicant must recognize that the manner of manufacture of the swirl means is irrelevant to the patentability of the apparatus claim, if the reference teaches the same structure. Therefore, the sequence of steps of claim 9, as well as the cutting step being a laser cutting step, as recited by instant claim 11, cannot be considered to impart patentability to the apparatus claims. Applicant should note that the primary reference clearly teaches that which is recited by instant claims 13 and 14.

Sheinman (Figs. 1 and 2; col. 2, lines 41-42) teach forming a swirl imparting vane structure integrally with the bottom plate of a separator similar to that of the primary reference, by way of a stamping process. It should be noted that the stamping process inherently performing a slitting step immediately followed by a bending step to form the swirl vane structure. It would have been obvious for an artisan at the time of the invention, to provide the swirl vane structure of the primary reference integrally with the bottom plate of the separator, in view of Sheinman, since such would facilitate easier

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assembly of the device over a structure wherein the bottom plate and the vanes were formed separately and then connected by welding, for example.

***Response to Arguments***

7. Applicant's arguments filed August 17, 2005 have been fully considered but they are not persuasive.

Applicant's arguments are based solely on the misreading of EPO 0 048 508 A2, which has been applied herein and in the previous Office action under 35 USC 102(b) to claims 1-8, and under 35USC 103(a) to claims 9-14.

According to applicant, EPO 0 048 508 A2 fails to disclose or suggest a secondary separation to remove entrained liquid from the secondary gas. Applicant's position is based upon the perceived silence of the reference regarding separation of the entrained liquid from the secondary gas stream within the outer space (70), which surrounds the walls (64) of the apparatuses (61). Wherein applicant concludes that no secondary separation takes place based upon the reference statement at page 10, lines 15-17, that the gas entrained within the liquid from the separating chambers will flow in an upward direction through the secondary gas outlet tubes, such a conclusion is untenable at best. The very fact that the reference states that the secondary gas passes through the secondary gas outlet tubes (69), while the liquid collected in the outer space (70) passes to the bottom part of the column through tube (71) belies applicant's conclusions. See page 10, lines 8-10. Furthermore, applicant has apparently decided to ignore the disclosure at page 10, lines 3-5, wherein it is specifically stated that the lower ends of the skirts (72) extend below the lower ends of

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the openings (67) in the walls (64) of separators (61). One having an ordinary level of skill within the art would recognize that the tortuous path that the secondary gas and entrained liquid stream must follow, first downwardly around the lower end of the skirt means (72) and then upwardly toward the secondary gas outlet means (69) will facilitate a separation of the heavier entrained liquid from the lighter secondary gas stream.

Please note that this line of reasoning assumes that applicant at least understands the mechanism by which a heavier (denser) stream is separated from a lighter (less dense) stream by applying centrifugal force to the mixed stream through the reversal or bending of the stream flow direction. Since applicant's arguments directed to the rejection of claims 1-8 are not supported by the teachings of the reference, the rejection thereof must stand.

With respect to the rejection of claims 9-14 over the combination of EPO 0 048 508 A2 taken together with Sheinman, as applied under 35 USC 103(a), applicant has relied solely upon the perceived deficiencies of the primary reference as means to rebut the rejection. Since, from the above discussion, such perceived deficiencies do not in fact, exist, the rejection of claims 9-14 must also stand.

### ***Conclusion***

8. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not

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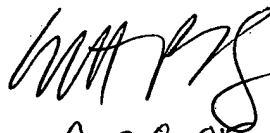
mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

9. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Scott Bushey whose telephone number is 571 272-1153. The examiner can normally be reached on M-Th 6:30-5:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Duane Smith can be reached on 571 272-1166. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Scott Bushey  
Primary Examiner  
Art Unit 1724

  
9-28-05

csb  
9-28-05